REMARKS

This application has been amended in a manner believed to place it in condition for allowance at the time of the next Official Action.

Claims 1, 6, and 7 are amended. Support may be found, for example, at specification page 5, Example 1, page 12, lines 6-13, and page 22, lines 10-18.

Claims 1-20 are pending in the present application.

The Official Action rejects claims 1-20 under 35 USC §112, second paragraph, as being indefinite. This rejection is respectfully traversed.

The position of the Official Action is that "sufficiently" renders claim 1 indefinite, and with an upper limit for the tenacity of the fiber claims 6 and 7 are indefinite.

Claim 1 is amended to clarify the meaning of "sufficiently slow rate" in a manner consistent with the specification, i.e., the rate is sufficiently slow to produce a prepolymer that produce a linear block polymer with the recited y values. Support for the "sufficiently slow rate" as recited may be found, for example, in Example 1. The polycaprolacton diol is added during "slow stirring, drop by drop" to 4,4'-diphenylmetandiisocyanate at 50-60°C. The resulting prepolymer is utilized in subsequent examples to form the claimed linear block polymer with $0 < y < 4$.

Claims 6 and 7 are amended to recite "such that a band formed from more than one fiber has a breaking force of 1200 N". One of ordinary skill in the art would have been able to determine the upper limit, based on a desired band cross section area, as well as the diameter and number of fibers required to form the band. See, e.g., present specification page 22, lines 10-18.

Therefore, the claims are definite, and withdrawal of the rejection is respectfully requested.

Claims 1-20 are rejected under 35 USC §102(b) as being anticipated by, or in the alternative, under 35 USC §103(a) as obvious over FLODIN US 6,210,441 ("FLODIN"). This rejection is respectfully traversed.

The position of the Official Action is that FLODIN discloses the same method and thereby obtains the same product as recited in claim 1. In particular, the Official Action states that FLODIN describes "drop-wise addition" and that the prepolymer can be prepared at or below 60°C.

However, FLODIN does not disclose the same method of forming the prepolymer as claimed, which determines the structure of the claimed polymer, e.g., the y value between 0 and 4.

The claimed linear block polymer is based on a prepolymer made by a method "consisting essentially of" adding an esterdiol to an aromatic diisocyanate at a sufficiently slow rate at a temperature of 50°C to 60°C to form the prepolymer so that 0

< y < 4 in a linear block polymer derived from the prepolymer. The term "consisting essentially of" excludes materials from the method that would materially affect the basic and novel characteristics of the claimed prepolymer used to obtain the claimed polymer. No catalyst is included in the claims.

Example 1 of the present specification illustrates this method. The chemicals disclosed in the method of forming the prepolymer are those that participate in the reaction. There is no catalyst used in forming the prepolymer.

A catalyst would increase the rate of the reaction used to form the prepolymer, and subsequent block polymer. Indeed, both the presence/absence of a catalyst and the temperature strongly influence the reaction rate, and, the reaction rate, strongly influences the claimed y value. The advantage of utilizing a slow rate at 50°C to 60°C is that the prepolymer reaction can be controlled to yield a more narrow chain length distribution in the prepolymer. Such a prepolymer provides the claimed y value in the linear block polymer is obtained, which results in a low elongation at break and a low degradation rate. Another advantage of not using a catalyst is that the prepolymer reaction requires a fewer number of chemicals for implant application.

Accordingly, the present invention, as claimed and disclosed, implicitly excludes the use of a catalyst when making the prepolymer.

Thus, FLODIN cannot anticipate claims 1-20, as FLODIN discloses the use of a catalyst at temperatures lower than 60°C-80°C, which would result in a faster reaction rate that would materially affect the claimed y value. (See, e.g., in column 4, lines 40-43 of FLODIN.)

FLODIN also fails to render obvious claims 1-20.

FLODIN neither discloses nor suggests a linear block polymer as recited with the claimed y values.

Moreover, FLODIN does not disclose nor suggest a method for obtaining a prepolymer in a manner that would provide the claimed y values in a linear block polymer.

FLODIN discloses obtaining a desired linear block polymer based on a prepolymer preparation method determined by a molar ratio of diisocyanate to diol and an elevated temperature of 60-80°C or lower temperatures with a catalyst. FLODIN discloses that for the shortest prepolymers, a ratio of 2 is selected, and for longer prepolymers a ratio of less than 2 is selected. See, column 4, lines 22-45.

The claimed invention is directed to short polymer segments, i.e., the y value is between 0 and 4, prepared by a prepolymer based on molar ratio of diisocyanate to diol of larger than 2 and a narrow chain length distribution, which is obtained by the sufficiently slow rate of diol addition at 50-60°C. The "consisting essentially of" language excludes other chemicals

that would materially affect the characteristics of the prepolymer.

One of ordinary skill in the art would have been strongly discouraged from omitting a catalyst in a prepolymer formation method at 50-60°C so as to even approach the claimed invention, including the y values, as FLODIN teaches away from doing so. Moreover, one would have been further discouraged from adding the diisocyanate to the diol such that the ratio in the resulting prepolymer is greater than 2, as FLODIN discloses that shortest prepolymer is obtained at a ratio of 2, and less than two for longer prepolymers.

Thus, FLODIN cannot render obvious claims 1-20.

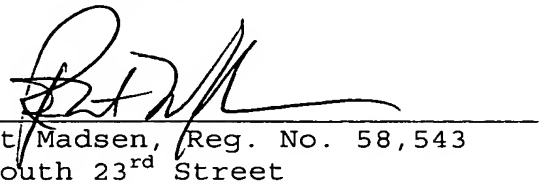
Therefore, withdrawal of the rejection is respectfully requested.

In view of the amendment to the claims and the foregoing remarks, applicant believes that the present application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON



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